

SUMMARY

This Environmental Assessment (EA) was prepared by the Bureau of Land Management (BLM) in cooperation with the Montana Department of Environmental Quality (MDEQ), and the Montana Board of Oil and Gas Conservation (MBOGC); to provide a coordinated analysis of the Powder River Gas, LLC (PRG) - Coal Creek Exploration Project Plan of Development (POD).

The analysis in this EA, along with other referenced environmental documents, provides the basis for BLM, MDEQ, and MBOGC decisions regarding PRG's Coal Creek POD. The agencies must decide whether to approve, approve with conditions, or deny the proposed wells, infrastructure, and water treatment on or for the benefit of leases associated with the proposed project.

PRG proposes to drill 16 exploratory wells at 8 well sites on private surface. Eight of the wells would be drilled in private minerals and eight wells would be drilled in federal minerals. The operator proposes to test these 16 wells, plus 2 existing wells, for CBNG potential. The project area is located in Sections 6 and 7, T. 8 S., R. 41 E., in Big Horn County of southeastern Montana. The surface in the project area is privately owned. Approximately 320 acres in the project area are private minerals and 440 acres are federal minerals.

The proposed 16 wells would be completed in the Wall and Flowers-Goodale coal seams in the Tongue River Member of the Fort Union Formation. The wells would be drilled, logged, tested and shut in if commercial quantities of gas are encountered. Gas, water and electric lines needed for testing operations would be installed in corridors to reduce surface disturbance. The POD also includes a proposal to treat water produced from the wells prior to discharging it into the Tongue River. Treatment and discharge of the produced water would be conducted under a Montana Pollution Discharge Elimination System (MPDES) permit issued by the MDEQ. PRG proposes to begin these operations soon after receipt of the necessary approvals, with completion of operations anticipated in 2005.

No gas production facilities are part of this proposed action. Following testing operations, the wells would be plugged according to federal or state requirements if no commercial quantities of gas were discovered. If commercial quantities of gas were present, PRG would first have to submit an additional POD for review and approval of production facilities.

Field inspections of the proposed well locations and associated infrastructure were conducted by BLM on September 16, 2003. During the inspections, all areas of proposed surface disturbance were visited to identify potential environmental impacts, and the effect on surface owner assets and land uses. The initial proposed pipeline from the Long Federal 5-6 well was moved to reduce surface disturbance as a result of the field inspection.

Issues of concern include impacts to wildlife, protection of cultural resources, effects on water quality and quantity, reclamation of disturbed areas, disposal of water treatment wastes and cumulative impacts. The proposed project is only exploration drilling and testing; impacts from the preferred alternative would be short-term and minor. Effects may include: air particulate emissions from construction and exhaust from drilling equipment, drawdown of groundwater and discharge of treated water from the private and federal wells, wildlife habitat fragmentation and disturbance to bald eagles from human/wildlife interactions and discovery of buried cultural resources during construction.

Various actions and management options were analyzed in three alternatives; the no action alternative (Alternative A), the no federal approval alternative (Alternative B), and approval of PRG's proposed action with addition mitigation (Alternative C). The agencies have identified Alternative C as the preferred alternative.

GLOSSARY

APPLICATION FOR PERMIT TO DRILL, DEEPEN OR PLUG BACK (APD): The Department of Interior permit application form needed to authorize oil and gas drilling activities on federal minerals.

COAL BED NATURAL GAS (aka COAL BED METHANE): A clean-burning natural gas found inside and around coal seams. The gas has an affinity to coal and is held in place by pressure from groundwater. Producing coal bed natural gas involves drilling into coal seams and reducing the hydrostatic pressure on the coal by producing the groundwater thus releasing the gas.

CUMULATIVE IMPACT: The impact on the environment that results from the positive or negative impacts of an action when added to other past, present and reasonable foreseeable future actions, regardless of what agency or person performed such action(s).

CONDITION OF APPROVAL (COA): Requirements imposed on the applicant under which condition the approval of an Application for a Permit to Drill or a Sundry Notice is approved.

LEASE: 1) An oil and gas lease is a contract which grants the lessee the rights to drill for and remove oil and gas deposits in the leased lands, subject to the terms and conditions incorporated in the lease; 2) The tract of land, on which a lease has been obtained, where producing wells and production equipment are located.

MINERAL DRAINAGE: A producing well that removes oil or gas from an adjacent lease.

MITIGATION MEASURES: Methods or procedures developed for the purpose of reducing or eliminating the impacts of an action. Mitigation may be built into the proposed project or required in an alternative as a condition of approval.

PROPOSED ACTION: An individual action or a combination of actions proposed on or to benefit federal leases.

SPLIT ESTATE: Surface and minerals of a given area in different ownerships. Frequently, the surface is privately-owned while the minerals are federally-owned.

ABBREVIATIONS/ACRONYMS

AO	Authorized Officer
APD	Application for Permit to Drill
ARM	Administrative Rules of Montana
BACT	Best Available Control Technology
BGS	Below Ground Surface
BLM	Bureau of Land Management
BMPs	Best Management Practices
CBNG	Coal Bed Natural Gas
Cfs	Cubic feet per second
COA	Conditions of Approval
CWA	Federal Clean Water Act
DNRC	Montana Department of Natural Resources and Conservation
EA	Environmental Assessment
EC	Electrical Conductivity
EPA	United States Environmental Protection Agency
FLPMA	Federal Land Policy Management Act
ft-amsl	Feet Above Mean Sea Level
FWS	Fish and Wildlife Service
GPM	Gallons Per Minute
GWIC	Groundwater Information Center
HMM	High Mean Monthly
HUC	Hydrologic Unit Code
LMM	Low Mean Monthly
MAAQS	Montana Ambient Air Quality Standards
MAQP	Montana Air Quality Permit
MBOGC	Montana Board of Oil and Gas Conservation
MBMG	Montana Bureau of Mines and Geology
MCA	Montana Codes Annotated
MEPA	Montana Environmental Policy Act
MDEQ	Montana Department of Environmental Quality
MLA	Mineral Leasing Act
MPDES	Montana Pollution Discharge Elimination System
MT FEIS	Montana Statewide Final Environmental Impact Statement (2003)
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NRHP	National Register of Historic Places
POD	Project Plan of Development
PRG	Powder River Gas, LLC
PSD	Prevention of Significant Deterioration
RFD	Reasonably Foreseeable Development
RFFA	Reasonable Foreseeable Future Actions
RMP	Resource Management Plan
SAR	Sodium Adsorption Ratio
7Q10	The lowest flow that would be expected to occur for seven consecutive days over any 10 year period
SHPO	State Historic Preservation Office
SOB	Statement of Basis
SSS	Special Status Species
SWPPP	Storm Water Pollution Prevention Plan
SWQATR	Surface Water Quality Analysis Technical Report
T/AC/YR	Tons per acre per year
TCP	Traditional Cultural Property
T/E	Threatened/Endangered

TDS	Total Dissolved Solids
THPO	Tribal Historic Preservation Office
TIE	Toxicity Identification Evaluation
TMDL	Total Maximum Daily Load
USGS	United States Geological Survey
WET	Whole Effluent Toxicity
WLS	Western Land Service
WMP	Water Management Plan
WMPP	Wildlife Monitoring Protection Plan
WNV	West Nile Virus
WQA	Montana Water Quality Act (75-5-101 et seq, MCA)
WY FEIS	Wyoming Environmental Impact Statement (2003)